

International Materials Institute: **C**ombinatorial **S**ciences and **M**aterials **I**formatics **C**ollaboratory (**CoSMIC**)

RPI, U. of Maryland, Florida International U.

DMR -0231291

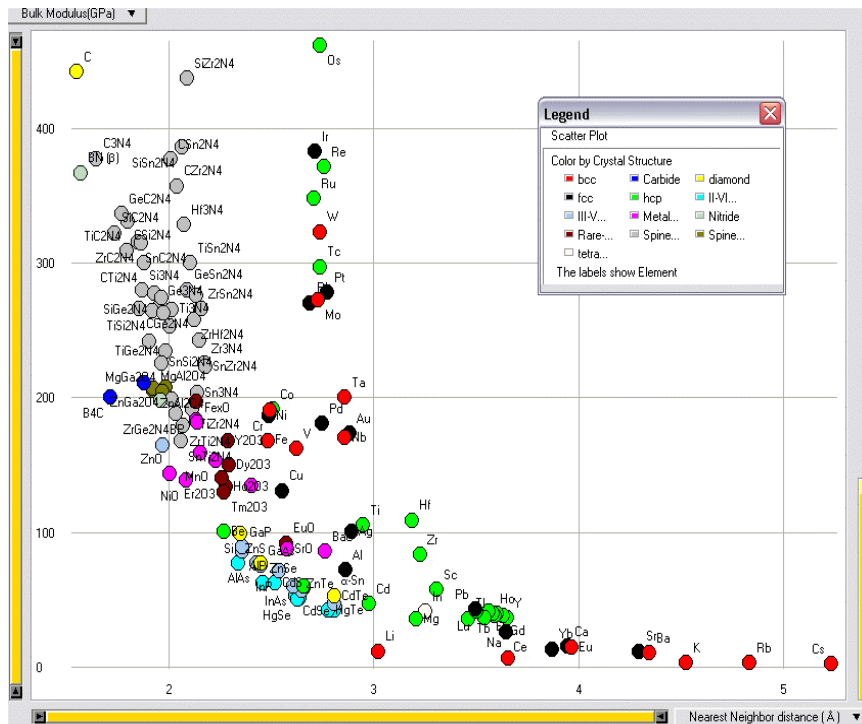
- Promotes the use of informatics and experimentation for materials discovery and design
- International consortium of universities and laboratories (Europe, Japan, Canada, South America)
- Operates through a cyber-infrastructure for global collaboration among researchers and educators



Data + Correlations + Theory = Knowledge-base

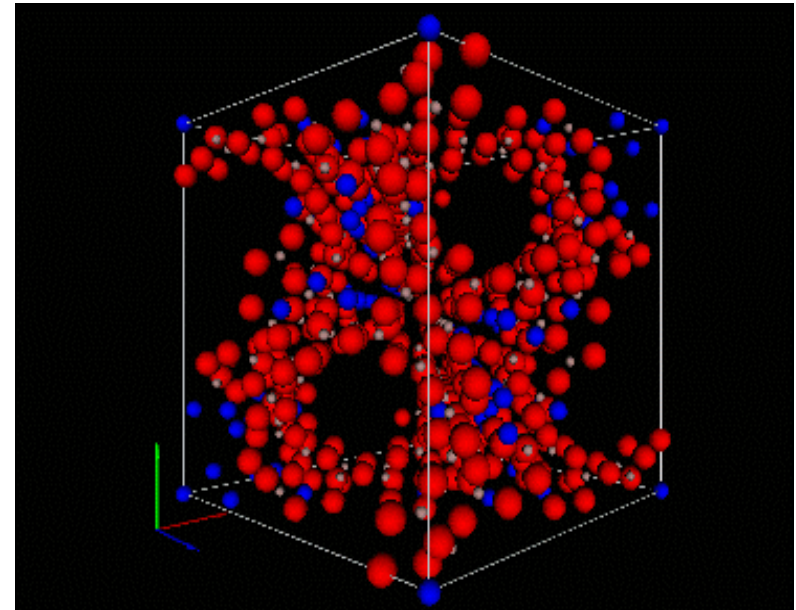
Research and Education on Crystallographic Databases

A materials prediction map for tailoring crystal chemistry to modulus



- informatics-derived database of crystal structure- modulus relationships allows for quick identification of promising materials

Visualizing the mathematics of space groups used in crystallography



- web-based module for teaching the methodology of reading and organizing crystallographic space group tables